

# RDO-to-PDF Conversion Tool

## ABSTRACT

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A process and apparatus for analyzing the binary RDO file structure, extracting all relevant data needed to reproduce the content, and generation of output in the PDF format is disclosed. The conversion process to PDF takes the following steps: In the first step, the binary RDO file is read and analyzed. Its internal structure is decoded---parsed---and transferred into a data structure representation in memory. In the second step, the data contained within the RDO file describing the arrangement of pages in the final document is extracted. This step is separate due to the internal organization of the RDO file. The various pieces of data pertaining to different pages are scattered throughout the file and must be collected for each page in this step. In addition, there are some data that are page-invariant and that apply to the entire document, such as header and footer messages, their location, or font selection. Once all of these data are gathered, the output can be generated by placing one or more TIFF bitmap files for each page onto the output page and adding the optional text messages for header, footer and page number. When all pages have been processed in this way, the final PDF file is self-contained and stored on disk. When the data files are not TIFF but PostScript, the situation is slightly different. Because positioning instructions may be included with the PostScript file, the RDO file contains only the filename. In the conversion process, an external, commercially available Postscript-to-PDF converter must be invoked to merge these pages into the output PDF.